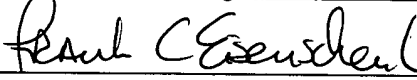


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Frank C. Eisenschenk, Ph.D., Patent Attorney

INFORMATION DISCLOSURE
STATEMENT

Patent Application

Docket No. ARS-121

Serial No. 10/566,929

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Meija Yang
Serial No. : 10/566,929
Filed : February 2, 2006
For : Novel Therapeutic Fusion Proteins

Mail Stop PCT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313

INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §§1.97 AND 1.98

Sir:

In accordance with 37 CFR §1.56, the references listed on the attached form PTO/SB/08 are being brought to the attention of the Examiner for consideration in connection with the examination of the above-identified patent application. A copy of each cited reference is enclosed.

It is respectfully requested that the references cited on the attached form PTO/SB/08 be considered in the examination of the subject application and that their consideration be made of record.

Applicant respectfully asserts that the substantive provisions of 37 CFR §§1.97 and 1.98 are met by the foregoing statement.

Respectfully submitted,



Frank C. Eisenschenk, Ph.D.

Patent Attorney

Registration No. 45,332

Phone No.: 352-375-8100

Fax No.: 352-372-5800

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FCE/sl

Attachments: Form PTO/SB/08; copies of cited references

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/566,929
				Filing Date	February 2, 2006
				First Named Inventor	Meija Yang
				Art Unit	
				Examiner Name	
Sheet	1	of	4	Attorney Docket Number	ARS-121

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number - Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	U1	US-			
	U2	US-			
	U3	US-			
	U4	US-			
	U5	US-			
	U6	US-			
	U7	US-			
	U8	US-			
	U9	US-			

FOREIGN PATENT DOCUMENTS						
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	F1	WO 97/45136 (CD-ROM)	12-04-1997	Baylor College of Medicine	All	
	F2	WO 03/20746 (CD-ROM)	03-13-2003	Biorexis Pharmaceutical Corporation	All	
	F3	WO 91/12023 (CD-ROM)	08-22-1991	Boston Biomedical Research Institute	All	
	F4	WO 96/39510 (CD-ROM)	12-12-1996	Transkaryotic Therapies, Inc.	All	
	F5	WO 02/44329 (CD-ROM)	06-06-2002	UAB Research Foundation	All	
	F6	WO 02/24929 (CD-ROM)	03-28-2002	Ramot University Authority for Applied Research and Industrial Development LTD.	All	
	F7	WO 02/083840 (CD-ROM)	10-24-2002	Arizeke Pharmaceuticals, Inc.	All	

Examiner Signature		Date Considered	
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	R1	ALVAREZ-HERNANDEZ, "The Effect of Apotransferrin on Iron Release From Caco-2 Cells, an Intestinal Epithelial Cell Line" <i>Blood</i> , May 15, 1998, pp. 3974-3979, Vol. 91, No. 10.	
	R2	BAKER, E.N. <i>et al.</i> , "Lactoferrin and Transferrin: Functional Variations on a Common Structural Framework" <i>Biochem. Cell Biol.</i> , 2002, pp. 27-34, Vol. 80.	
	R3	BEISSER, P.S. <i>et al.</i> , "Viral Chemokine Receptors and Chemokines in Human Cytomegalovirus Trafficking and Interaction with the Immune System" <i>Curr. Top Microbiol. Immunol.</i> , 2002, pp. 203-234, Vol. 269.	
	R4	BENNETT, M.J. <i>et al.</i> , "Crystal Structure of the Hereditary Haemochromatosis Protein HFE Complexed with Transferrin Receptor" <i>Nature</i> , January 6, 2000, pp. 46-53, Vol. 403.	
	R5	DAVIES, P.S. <i>et al.</i> , "Evidence for the Interaction of the Hereditary Haemochromatosis Protein, HFE, with the Transferrin Receptor in Endocytic Compartments" <i>Biochem. J.</i> , 2003, pp. 145-153, Vol. 373	
	R6	DRAKESMITH, H. <i>et al.</i> , "The Hemochromatosis Protein HFE Inhibits Iron Export from Macrophages" <i>PNAS USA</i> , November 26, 2002, pp. 15602-15607, Vol. 99, No. 24.	
	R7	EHRlich, R. <i>et al.</i> , "HFE- A Novel Nonclassical Class I Molecule that is Involved in Iron Metabolism" <i>Immunity</i> , November 2000, pp. 585-588, Vol. 13.	
	R8	FEDER, J.N. <i>et al.</i> , "A Novel MHC Class I-like Gene is Mutated in Patients with Hereditary Haemochromatosis" <i>Nature Genetics</i> , August 1996, pp. 399-408, Vol. 13.	
	R9	FEDER, J.N. <i>et al.</i> , "The Hemochromatosis Gene Product Complexes with the Transferrin Receptor and Lowers its Affinity for Ligand Binding" <i>PNAS USA</i> , February 1988, pp. 1472-1477, Vol. 95.	
	R10	FILLEBEEN, C. <i>et al.</i> , "Receptor-mediated Transcytosis of Lactoferrin through the Blood-Brain Barrier" <i>J. Biol. Chem.</i> , March 12, 1999, pp. 7011-7017, Vol. 274, No. 11.	
	R11	GROSS, C.N. <i>et al.</i> , "Co-trafficking of HFE, a Nonclassical Major Histocompatibility Complex Class I Protein, with the Transferrin Receptor Implies a Role in Intracellular Iron Regulation" <i>J. Biol. Chem.</i> , August 21, 1998, pp. 22068-22074, Vol. 273, No. 34.	
	R12	IKUTA, K. <i>et al.</i> , "Overexpression of Hemochromatosis Protein, HFE, Alters Transferrin Recycling Process in Human Hepatoma Cells" <i>Biochimica et Biophysica Acta</i> , 2000, pp. 221-231, Vol. 1496.	
	R13	JUSSILA, L. <i>et al.</i> , "Vascular Growth Factors and Lymphangiogenesis" <i>Physiol. Rev.</i> , July 2002, pp. 673-700, Vol. 82.	

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				Filing Date	February 2, 2006
				First Named Inventor	Meija Yang
				Group Art Unit	
Examiner Name					
Attorney Docket Number	ARS-121				
Sheet	3	of	4		

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	R14	KIM, E.S. <i>et al.</i> , "Potent VEGF Blockade Causes Regression of Coopted Vessels in a Model of Neuroblastoma" <i>PNAS</i> , August 20, 2002, pp. 11399-11404, Vol. 99, No. 17.	
	R15	LAWRENCE, C.M. <i>et al.</i> , "Crystal Structure of the Ectodomain of Human Transferrin Receptor" <i>Science</i> , October 22, 1999, pp. 779-782, Vol. 286.	
	R16	LEBRON, J.A. <i>et al.</i> , "Crystal Structure of the Hemocromatosis Protein HFE and Characterization of its Interaction with Transferrin Receptor" <i>Cell</i> , April 3, 1988, pp. 111-123, Vol. 93.	
	R17	LORENZ, H.-M. <i>et al.</i> , "Perspectives for TNF- α -targeting Therapies" <i>Arthritis Res.</i> , May 9, 2002, pp. 17-24, Vol. 4, Supplemental 3.	
	R18	MCABEE, D.D. <i>et al.</i> , "Endocytosis and Degradation of Bovine Apo- and Holo-lactoferrin by Isolated Rat Hepatocytes are Mediated by Recycling Calcium-Dependent Binding Sites" <i>Biochemistry</i> , 1993, pp. 13749-13760, Vol. 32.	
	R19	MEILINGER, M. <i>et al.</i> , "Removal of Lactoferrin from Plasma is Mediated by Binding to Low Density Lipoprotein Receptor-related Protein/ α_2 -macroglobulin Receptor and Transport to Endosomes" <i>FEBS Letters</i> , January 1995, pp. 70-74, Vol. 360.	
	R20	NAKANISHI, K. <i>et al.</i> , "Interleukin-18 Regulates Both Th1 and Th2 Responses" <i>Annu. Rev. Immunol.</i> , 2001, pp. 423-474, Vol. 19.	
	R21	NUÑEZ, M.T. <i>et al.</i> , "Apotransferrin and Holotransferrin Undergo Different Endocytic Cycles in Intestinal Epithelia (Caco-2) Cells" <i>J. Biol. Chem.</i> , August 1, 1997, pp. 19425-19428, Vol. 272, No. 31.	
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	R23	PARK, E. <i>et al.</i> , "Production and Characterization of Fusion Proteins Containing Transferrin and Nerve Growth Factor" <i>Journal of Drug Targeting</i> , 1998, pp. 53-64, Vol. 6, No. 1.	
	R24	PILLAY, C.S. <i>et al.</i> , "Endolysosomal Proteolysis and its Regulation" <i>Biochem. J.</i> , 2002, pp. 417-429, Vol. 363.	
	R25	POL, A. <i>et al.</i> , "Identification and Distribution of Proteins in Isolated Endosomal Fractions of Rat Liver: Involvement in Endocytosis, Recycling and Transcytosis" <i>Biochem. J.</i> , 1997, pp. 435-443, Vol. 323.	
	R26	QIAN, Z.M. <i>et al.</i> , "Targeted Drug Delivery via the Transferrin Receptor-Mediated Endocytosis Pathway" <i>Pharmacological Reviews</i> , 2002, pp. 561-587, Vol. 54, No. 4.	

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	R27	RAMALINGAM, T.S. <i>et al.</i> , "Binding to the Transferrin Receptor is Required for Endocytosis of HFE and Regulation of Iron Homeostasis" <i>Nature Cell Biology</i> , December 2000, pp. 953-957, Vol. 2.	
	R28	RICHARDSON, D.R. <i>et al.</i> , "The Molecular Mechanisms of the Metabolism and Transport of Iron in Normal and Neoplastic Cells" <i>Biochimica et Biophysica Acta</i> , 1997, pp. 1-40, Vol. 1331.	
	R29	ROGOV, S.I. <i>et al.</i> , "A Numerical Measure of Amino Acid Residues Similarity Based on the Analysis of Their Surroundings in Natural Protein Sequences" <i>Protein Engineering</i> , 2001, pp. 459-463, Vol. 14, No. 7.	
	R30	ROY, C.N. <i>et al.</i> , "The Hereditary Hemochromatosis Protein, HFE, Specifically Regulates Transferrin-mediated Iron Uptake in HeLa Cells" <i>J. Biol. Chem.</i> , March 26, 1999, pp. 9022-9028, Vol. 274, No. 13.	
	R31	SACHSE, M. <i>et al.</i> , "Endosomes: Multipurpose Designs for Integrating Housekeeping and Specialized Tasks" <i>Histochem. Cell. Biol.</i> , 2002, pp. 91-104, Vol. 117.	
	R32	SALTER-CID, L. <i>et al.</i> , "Transferrin Receptor is Negatively Modulated by the Hemochromatosis Protein HFE: Implications for Cellular Iron Homeostasis" <i>PNAS USA</i> , May 1999, pp. 5434-5439, Vol. 96.	
	R33	SHAH, D. <i>et al.</i> , "Transcellular Delivery of an Insulin-Transferrin Conjugate in Enterocyte-like Caco-2 Cells" <i>J. Pharma. Sci.</i> , December 1996, pp. 1306-1311, Vol. 85, No. 12.	
	R34	SITARAM, M.P. <i>et al.</i> , "Isolated Rat Hepatocytes Differentially Bind and Internalize Bovine Lactoferrin N- and C-lobes" <i>Biochem. J.</i> , 1997, pp. 815-822, Vol. 323.	
	R35	SWAAN, P.W., "Recent Advances in Intestinal Macromolecular Drug Delivery via Receptor-Mediated Transport Pathways" <i>Pharm. Res.</i> , 1998, pp. 826-834, Vol. 15, No. 6.	
	R36	TERPE, K., "Overview of Tag Protein Fusions: From Molecular and Biochemical Fundamentals to Commercial Systems" <i>Appl. Microbiol. Biotechnol.</i> , 2003, pp. 523-533, Vol. 60.	
	R37	VOGT, T.M. <i>et al.</i> , "Heterotypic Interactions Between Transferrin Receptor and Transferrin Receptor 2" <i>Blood</i> , March 1, 2003, pp. 2008-2014, Vol. 101, No. 5.	
	R38	WAHEED, A. <i>et al.</i> , "Regulation of Transferrin-mediated Iron Uptake by HFE, the Protein Defective in Hereditary Hemochromatosis" <i>PNAS USA</i> , March 5, 2002, pp. 3117-3122, Vol. 99, No. 5.	
	R39	WONG, H. <i>et al.</i> , "Construction of Recombinant Chimeric Human Lactoferrin/Bovine Transferrins" <i>Adv. Exp. Med. Biol.-Advances in Lactoferrin Research</i> , Ed. by Spike <i>et al.</i> , 1988, Plenum Press, pp. 101-106.	

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